Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently Amended) A graphical user interface for managing a plurality of system components within a controlled environment, comprising:

a first set of control objects for selecting a system component within the controlled environment, wherein activation of a control object from said first set denotes said selected system component and populates the user interface with control options, wherein each control option is associated with a sequence of commands that, when executed, sends instructions to control the operations or functions of said selected system component; and

a second set of control objects~~, which are~~ displayed concurrently with said control options associated with said selected system component, wherein each control object within said second set of control objects is configurable for viewing on the user interface and represents an ~~representing~~ affiliate system ~~components~~ component capable of providing an input to said selected system component, wherein activation of a control object from said second set populates the user interface with control options for an affiliate system component associated with the activated control object from the second set, wherein each control option for said affiliate system component is associated with a sequence of commands that, when executed, sends instructions to control the operations or functions of said affiliate system component, and wherein said control options for said

affiliate system component are displayed concurrently with said second set of control objects on the user interface.

2-4. (Previously Cancelled)

5. (Original) The graphical user interface of claim 1, wherein said first set of control objects represents a plurality of component types within the controlled environment.

6-10. (Previously Cancelled)

11. (Original) The graphical user interface of claim 1, further comprising: device definition means for specifying input or output links or dependencies among one or more affiliate system components and a primary system component, and thereby establishing a chain of system components including said primary system component and said one or more affiliate system components, wherein said primary system component is associated with a primary control object from said first set.

12. (Original) The graphical user interface of claim 11, wherein activation of said primary control object populates the user interface with control options for executing commands to send instructions to control the operations or functions of said chain of system components.

13. (Currently Amended) A method of managing a plurality of system components within a controlled environment, comprising:

presenting, on a user interface, a first set of control objects, each object being

associated with one or more system components within the controlled environment;

selecting a system component in response to receiving an activation signal associated with a control object from said first set;

populating said user interface with control options for the selected system component;

associating each control option with a sequence of executable commands that sends instructions to control the operations or functions of the selected system component; ~~and~~

presenting, on said user interface concurrently with said control options associated with said selected system component, a second set of control objects, wherein each control object within said second set of control objects represents an ~~representing~~ affiliate system ~~components~~ component capable of providing an input to the selected system component and has been configured for viewing on said user interface;

presenting, on said user interface concurrently with said second set of control objects, control options for an affiliate system component in response to activating a control object from said second set; and

associating each control option for said affiliate system component with a sequence of executable commands that sends instructions to control the operations or functions of said affiliate system component.

14. (Previously Cancelled)

15. (Currently Cancelled)

16. (Currently Cancelled)

17. (Previously Cancelled)

18. (Previously Cancelled)

19. (Original) The method of claim 13, wherein said first set of control objects represents a plurality of component types within the controlled environment.

20. (Previously Cancelled)

21. (Previously Presented) The method of claim 13, further comprising:

selecting one or more control objects from said first set to designate system components, wherein said system components can operate in either an on or off state;

presenting, on said user interface, a switch object that, when activated, executes a global command for the designated system components; and

executing said global command to send instructions to alter the on-off state of the designated system components.

22. (Previously Presented) The method of claim 13, further comprising:

selecting one or more control objects from said first set to designate a component type;

presenting, on said user interface, a switch object that, when activated, executes a global command for one or more system components matching said component type, wherein said system components can operate in either an on or off state; and

executing said global command to send instructions to alter the on-off state of said one or more system components matching said component type.

23. (Previously Cancelled)

24. (Previously Presented) The method of claim 13, further comprising:

selecting one or more control objects from said first set to designate system components, wherein said system components can operate in either an on or off state;

presenting, on said user interface concurrently with said first set, a switch object that, when activated, executes a global command for the designated system components; exempting from said global command at least one of one or more specified system components, one or more system components matching a specified component type, and one or more system components positioned within a specified region within the controlled environment; and

executing said global command to send instructions to alter the on-off state of all designated system components except for the exempted one or more system components.

25. (Original) The method of claim 13, further comprising:

specifying input or output links or dependencies among one or more affiliate system components and a primary system component, and

thereby establishing a chain of system components including said primary system component and said one or more affiliate system components, wherein said primary system component is associated with a primary control object from said first set.

26. (Original) The method of claim 25, wherein activation of said primary control object populates said user interface with control options for executing commands to send instructions to control the operations or functions of said chain of system components.

27. (Currently Amended) A computer program product comprising a computer useable medium having computer readable program code means embedded in said medium for causing a computer to manage a plurality of system components within a controlled environment, comprising:

first computer readable program code means for presenting, on a user interface, a first set of control objects, each object being associated with one or more system components within the controlled environment;

second computer readable program code means for selecting a system component in response to receiving an activation signal associated with a control object from said first set;

third computer readable program code means for populating said user interface with control options for the selected system component;

fourth computer readable program code means for associating each control option with a sequence of executable commands that sends instructions to control the operations or functions of the selected system component; ~~and~~

fifth computer readable program code means for presenting, on said user interface concurrently with said control options associated with the selected system component, a second set of control objects, wherein each control object within said

second set of control objects is configurable for viewing on said user interface and represents an ~~representing~~ affiliate system ~~components~~ component capable of providing an input to the selected system component;

sixth computer readable program code means for presenting, on said user interface concurrently with said second set of control objects, control options for an affiliate system component in response to activating a control object from said second set; and

seventh computer readable program code means for associating each control option for said affiliate system component with a sequence of executable commands that sends instructions to control the operations or functions of said affiliate system component.

28. (Previously Cancelled)

29. (Previously Cancelled)

30. (Currently Cancelled)

31. (Previously Cancelled)

32. (Previously Cancelled)

33. (Previously Presented) The graphical user interface of claim 1, wherein said second set of control objects represents a plurality of component types within the controlled environment.

34. (Previously Presented) The method of claim 13, wherein said second set of control objects represents a plurality of component types within the controlled environment

35. (New) The method of claim 13, further comprising configuring affiliated system components for viewing as control objects in said second set of control objects, including selecting from all available affiliated system components those affiliated system components that should be displayed on said user interface.

36. (New) The method of claim 13, further comprising configuring affiliated system components for viewing as control objects in said second set of control objects, including selecting from all available affiliated system components those affiliated system components that should be hidden from display on said user interface.

37. (New) The system of claim 1, further comprising means for configuring affiliated system components for viewing as control objects in said second set of control objects by selecting from all available affiliated system components those affiliated system components that should be displayed on the user interface.

38. (New) The system of claim 1, further comprising means for configuring affiliated system components for viewing as control objects in said second set of control objects by selecting from all available affiliated system components those affiliated system components that should be hidden from display on the user interface.

39. (New) The computer program product of claim 27, further comprising computer readable program code means for configuring affiliated system components for viewing as control objects in said second set of control objects by selecting from all available affiliated system components those affiliated system components that should be displayed on said user interface.

40. (New) The computer program product of claim 27, further comprising computer readable program code means for configuring affiliated system components for viewing as control objects in said second set of control objects by selecting from all available affiliated system components those affiliated system components that should be hidden from display on said user interface.